

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

I. Introduction

The second full paragraph on page 3 is being amended to correct an error in translation. No new matter is being added.

Claims 1-11 are requested to be cancelled, without prejudice or disclaimer.

Claims 12-17 are being added. Support for these new claims can be found throughout the specification as-filed, including the original claims. Exemplary support for these new claims is listed in the table below.

Claim	Exemplary Support
12	Claim 7; page 2, last paragraph
13	Claim 8; page 2, last paragraph
14	Claim 9; page 3, 2 nd full paragraph
15	Claim 10; page 4, 1 st full paragraph
16	Claim 11; page 4, 1 st full paragraph
17	Claims 8-11

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. No new matter is being added.

After amending the claims as set forth above, claims 12-17 are now pending.

II. Claim Rejections – 35 U.S.C. § 112, second paragraph

Claims 1-11 stand rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite, because they recite “a use without any active, positive steps delimiting how this use is actually practiced.” Office action at 2. Applicants respectfully traverse this ground of rejection.

Without acquiescing in the propriety of the rejection, claims 1-11 have been cancelled, and claims 12-16 are drawn to a target. Thus, the pending claims are not method claims and require no method steps. Accordingly, rejection is rendered moot by amendment. Thus, Applicants respectfully request withdrawal of this ground of rejection.

III. Claim Rejection – 35 U.S.C. § 101

Claims 1-11 stand rejected under 35 U.S.C. § 101 as allegedly lacking utility. The examiner argues that “the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. § 101.” Applicants respectfully traverse this ground of rejection.

As discussed above in Section II, the claims as amended are not method claims and are instead drawn to a target. Accordingly, the rejection is rendered moot. Thus, Applicants respectfully request withdrawal of this ground of rejection.

IV. Claim Objections

The examiner objects to claims 4-6 and 10-11 as being improper multiple dependent claims. However, the preliminary amendment filed with this application on October 11, 2001 removed the multiple dependencies from the claims. Nonetheless, the cancellation of claims 1-11 with this amendment renders this objection moot.

V. Claim Rejections – 35 U.S.C. § 102

Claims 1-5 and 7-9 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 5,271,096 to Cook. The table below summarizes the passages relied on by the examiner to reject the claims.

Claim	Passage from Cook Cited by the Examiner
1	Fig. 1; col. 4, lines 52-68
2	Fig. 1; col. 9, lines 39-41; col. 5, lines 19-20.
3	Fig. 1; col. 9, lines 39-41.
4	Fig. 2; col. 9, lines 28-46.
5	Fig. 1; col. 10, lines 13-15.
7	Fig. 1; col. 4, lines 52-68.
8	Fig. 1; col. 9, lines 39-41; col. 5, lines 19-20.
9	Fig. 1, col. 9, lines 37-47.

Applicants respectfully traverse this ground of rejection.

A. Introduction

Targets used for calibration of digital input devices should satisfy a number of boundary conditions. For example, since calibration and data measurement is typically optimized for D50 illumination and print control is typically performed using D65 illumination, the colors of the target should not exhibit unexpected metamerism effects. Accordingly, not all CMYK colors can be used. Similarly, the paper used for printing the target also should not exhibit unexpected metamerism effects. Thus, the paper should be a bright white having no optical brighteners.

Unfortunately, these boundary conditions cannot be met by traditional photographically produced targets. Such targets are produced using an additive printing process, and both the paper and the colorants exhibit strong and unexpected metamerism effects. Similarly, targets made using colors and paper for computer printers, which also employ an additive process, also fail to meet these boundary conditions.

The present invention provides a target for calibration of digital input devices that do not exhibit unexpected metameric effects. The targets are made using a subtractive printing process. The use of a subtractive printing process allows the production of targets with less rounding losses and cutoffs (paragraph bridging pages 2-3). In addition, each color can be represented on the target multiple times allowing variations in illumination to be corrected. Accordingly, targets can be made with a greater accuracy.

B. Cook Does Not Teach A Target “For Calibration Of Digital Input Devices ... Printed By A Subtractive Multicolor Printing Process”

Cook discloses a calibration process specific for a particular scanner and printer combination. Specifically, Cook describes printing and then scanning a stored image, a “calibration image,” to obtain a “resultant calibration image” (abstract). The calibration image exhibits the error of the printing process, errors introduced by scanning, and the errors introduced by the photocells or illumination used (col. 3, lines 18-24). This calibration image is compared to the resultant calibration system to determine the distortion added to the printer-scanner combination (*id.*). Thus, the image cannot be used for the calibration of the scanner alone.

Cook further teaches how the scanner can be calibrated. Specifically, Cook discloses that “a known picture” can be scanned to form a calibration image, which is compared with the “known” values (col. 5, lines 46-68). This data is used to calibrate the scanner to produce linearly proportional data (*id.*). However, Cook does not teach how to produce this “known picture.” In fact, techniques employed at the time of Cook were based on photographically exposed picture prints, i.e., an additive process. Accordingly, Cook does not teach or suggest a target “printed by a subtractive multicolor printing process.”

For at least these reasons, Applicants respectfully request reconsideration and withdrawal of this ground of rejection.

VI. Claim Rejection – 35 U.S.C. § 103

Claims 6 and 10-11 stand rejected under 35 U.S.C. § 103 as allegedly obvious over Cook in view of U.S. Patent No. 5,416,613 to Rolleston *et al.* According to the examiner, Rolleston remedies Cook's deficiencies in failing to teach claims 6 and 10-11. The examiner cited the passages cited below as support of this conclusion.

Claim	Passage from Cook Cited by the Examiner
6	Fig. 2; col. 6, lines 33-68; col. 7, lines 1-10
10	Fig. 2; col. 6, lines 33-68; col. 7, lines 1-10
11	Fig. 2; col. 5, lines 62-68; col. 6, lines 1-2.

Applicants respectfully traverse this ground of rejection.

A. Rolleston Does Not Remedy The Deficiencies Of Cook

As noted above, Cook does not teach a target “for calibration of digital input devices ... printed by a subtractive multicolor printing process,” and Rolleston does not remedy this deficiency. Indeed, Rolleston relates to a system for calibrating a printer – an output device. Input and output devices have entirely different functions. Thus, one of skill in the art would have no motivation to combine the teachings of Rolleston and Cook.

In fact, Rolleston is concerned with “printer non-uniformities” (col. 6, line 33 – col. 7, line 10). Thus, the printed patches may vary in color. In contrast, the targets of the present invention can be used for the adjustment of deviations in illumination (page 3, last paragraph). In order to adjust for such deviations, the color cannot vary. Accordingly, Rolleston teaches away from the claimed invention.

C. Rolleston Does Not Disclose Frequency Modulated Screening

Applicants also note that Rolleston does not disclose frequency modulated screening. The passage cited by the examiner relates to forming a look-up table. There is no teaching or suggestion that this look-up table is used for frequency modulated printing. Accordingly, Rolleston does not teach or suggest the invention of claim 16.

For at least these reasons, Applicants respectfully request reconsideration and withdrawal of this ground of rejection.

CONCLUSION

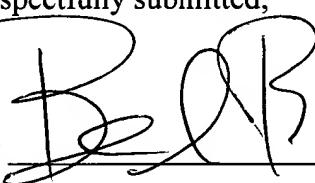
Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

By



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